

PROCEEDINGS

OF THE

WASHINGTON ACADEMY OF SCIENCES

VOL. II, PP. 477-486.

DECEMBER 20, 1900.

PAPERS FROM THE HARRIMAN ALASKA
EXPEDITION.

XI.

ENTOMOLOGICAL RESULTS (5):

ARACHNIDA.

[PLATE XXIX.]

BY NATHAN BANKS.

THE spiders collected on the Harriman Expedition show considerable affinity to those of the State of Washington, but there are some, principally among the small Theridiidæ, that are peculiar to Alaska. Dr. Marx, in the Proceedings of the Entomological Society of Washington (Vol. II, p. 186), gave a list of Arctic spiders, including those known to him from Alaska, in which there were 62 species, many of them undescribed. In the list of 52 species given below are at least six not known to Marx. There are no remarkable forms in the collection. Of the five harvest-spiders collected, three are known from California and Washington, one recently described from the Commander Islands, and one which appears to be new. The one Pseudoscorpion is common in the coast regions of Oregon and Washington. Of the two mites, one is peculiar on account of its slenderness and armed hind legs.

Besides the 52 species recorded in the list, there are a few specimens of small Theridiidæ which can not be treated without more material, including the male sex.

ARANEIDA.

Family DRASSIDÆ.

Prosthesima niger Banks.

Prosthesima niger BANKS, Trans. Amer. Entom. Soc., p. 62, 1896.

Two specimens, one from Muir Glacier (June), and one from Metlakahla. Known from State of Washington.

Family CLUBIONIDÆ.

Clubiona pacifica Banks.

Clubiona pacifica BANKS, Trans. Amer. Entom. Soc., p. 65, 1896.

Two specimens, one adult from Juneau, and one young from Kukak Bay. Previously known from Washington.

Family AGALENIDÆ.

Agalena pacifica Banks.

Agalena pacifica BANKS, Journ. N. Y. Entom. Soc., p. 89, 1896.

Agalena curta MCCOOK, Amer. Spiders, III, pl. XXIX, figs. 2, 3.

A few specimens from Kadiak (July). Known from California and Washington.

Cybæus reticulatus Simon.

Cybæus reticulatus SIMON, C. R. Soc. Entom. Belg., p. LVI, 1886.

Many specimens from Sitka, Yakutat Bay, Kadiak, Popof Island, and Metlakahla. Previously known from Oregon and Washington.

Cybæus pusillus Simon.

Cybæus pusillus SIMON, C. R. Soc. Entom. Belg., p. LVII, 1886.

Two specimens from Berg Bay (June). Known from Washington.

Family THERIDIIDÆ.

Theridium sexpunctatum Emerton.

Theridium sexpunctatum EMERTON, Trans. Conn. Acad., VI, p. 12, 1882.

Theridium marxi KEYSERLING, Die Spinn. Amer. Therid., II, p. 231, 1886.

Several specimens from Sitka, Yakutat Bay, Berg Bay, and Kadiak (June and July). Known from New York, New Hampshire, and Washington.

Ceratinella sp.

Plate XXIX, fig. 5.

Cephalothorax, sternum and mandibles reddish; abdomen black; legs pale reddish except the patellæ, which are pale yellowish; no abdominal plate except a small piece at base of the spinnerets; P.M.E.

once and one-half their diameter apart, twice their diameter from the equal P.S.E.

One female from Yakutat: probably new, but better not named in absence of the male.

Cornicularia recurvata sp. nov.

Plate XXIX, fig. 9.

Cephalothorax red-brown, mandibles yellow-brown, sternum and abdomen black, legs pale yellowish. Head of male high, with a recurved horn in front, tipped with stiff, back-directed hairs; sternum broad, convex, blunt-pointed between the hind coxæ; legs slender, anterior tarsus nearly as long as the metatarsus, which is much shorter than the tibia; male palpus simple, tibia short, with a short, pointed process on outer tip, hook stout and short, bulb very large, terminating in a short process; no long stylet. Length 1.7 mm.

One male from the Muir Glacier; readily known by the large, recurved horn.

Type.—Cat. no. 5268, U. S. National Museum.

Cornicularia varipes sp. nov.

Plate XXIX, fig. 4.

Cephalothorax reddish, shining, margined with black; head blackish, with median and lateral black lines; mandibles red-brown; sternum reddish, scarcely rugulose, maxillæ brown; abdomen black; legs with femora and tibiæ reddish, the former at tip and the latter at base yellowish; metatarsi yellowish; tarsi brown; P.M.E. about their diameter apart and about the same distance from the equal P.S.E.; A.M.E. smaller, hardly their diameter apart, about their diameter from the larger A.S.E.; between the M.E. is a faint trace of a swelling, quadrangle of M.E., much higher than broad behind; abdomen about twice as long as wide, with short hairs. Length 2.6 mm.

One female from Popof Island. The colors of the legs will serve to separate it from the other species of the genus until the male is known.

Type.—Cat. no. 5269, U. S. National Museum

Cornicularia sp.

One female, similar to *C. communis* Emer., but different by shape of epigynum. Yakutat (June).

Lophocarenum sp.

One female from Muir Glacier.

Gonglydium alascensis sp. nov.

Plate XXIX, fig. 3.

Cephalothorax, legs and mandibles pale yellowish; eyes on black

spots; sternum and abdomen black, spinnerets pale. Posterior eye-row slightly procurved; P.M.E. their diameter apart, about as far from the equal P.S.E., which touch the A.S.E.; A.M.E. smaller, scarcely their diameter apart, and a little further from the larger A.S.E. Legs slender, tibia with two spines above, one near base, one near tip, one spine on patella; mandibles vertical, scarcely divergent, without teeth in front; abdomen one and two-thirds as long as broad; head of male not elevated; the epigynum, which is rather prominent from side view, shows a broad median septum with an oval cavity each side. Length 2.1 mm.

Three specimens from Berg Bay.

Type.—Cat. no. 5270, U. S. National Museum.

Gonglydium sp.

Two females of a pale species from the Muir Glacier; they may belong to some species of which the male only is known. The epigynum is an elliptical area with a nearly square cavity in posterior part; on middle of hind margin is a denticle projecting forward.

Gonglydium falsificum (Keys.).

Erigone falsificum KEYSERLING, Die Spinn. Amer. Therid., II, p. 259, 1886.

One female from the Muir Glacier agrees well with the description and figure of Keyserling. The male is unknown. Described from Alaska.

Erigone coloradensis Keys.

Erigone coloradensis KEYSERLING, Die Spinn. Amer. Therid., II, p. 168, 1886.

A few specimens from Kadiak and Yakutat (June). Known from Colorado and Washington.

Erigone simillima Keys.

Erigone simillima KEYSERLING, Die Spinn. Amer. Therid., II, p. 170, 1886.

Several from Popof Island, and Saldovia, Cook Inlet. Close to the preceding and probably but an extreme form of it. Described from Alaska.

Erigone famelica Keys.

Plate XXIX, figs. 7, 8.

Erigone famelica KEYSERLING, Die Spinn. Amer. Therid., II, p. 186, 1886.

A pair from Kadiak (July), and one from the Muir Glacier. The figure gives a different view of the palpus from that of Keyserling. Described from Alaska.

Pedanostethus riparius Keys.

Pedanostethus riparius KEYSERLING, Die Spinn. Amer. Therid., II, p. 265, 1886.

Several females from Berg Bay, Yakutat, the Muir Glacier, and Orca (June). Known from Washington and Lake Superior.

Linyphia pusilla Keys.

Linyphia pusilla KEYSERLING, Die Spinn. Amer. Therid., II, p. 55, 1886.

Many specimens from Sitka, Yakutat Bay, Kakiak and Metlakahla. Europe and northern United States.

Linyphia phrygiana Keys.

Linyphia phrygiana KEYSERLING, Die Spinn. Amer. Therid., II, p. 60, 1886.

One from Sitka (June). Europe and northern United States.

Linyphia reducta Keys.

Linyphia reducta KEYSERLING, Die Spinn. Amer. Therid., II, p. 73, 1886.

Two young females from Cook Inlet. Described from Washington.

Linyphia sitkænsis Keys.

Linyphia sitkænsis KEYSERLING, Die Spinn. Amer. Therid., II, p. 86, 1886.

One female from Yakutat. Described from Alaska.

Labulla altiocolata Keys.

Labulla altiocolata KEYSERLING, Die Spinn. Amer. Therid., II, p. 94, 1886.

One young specimen from Juneau. Described from Washington.

Lepthyphantes alascensis sp. nov.

Plate XXIX, fig. 6.

Cephalothorax, legs and mandibles pale yellowish; eyes on black spots; sternum blackish; abdomen black, a broad pale stripe on each upper side, spinnerets pale. Posterior eye-row slightly recurved, P.M.E. less than their diameter apart, scarcely farther from the nearly equal P.S.E., A.M.E. smaller, less than their diameter apart, much farther from the larger A.S.E., quadrangle of M.E. much higher than broad behind, S.E. touching. Mandibles long, vertical, plainly divergent, with three large teeth on front lower margin. Leg I longest, tibia I longer than metatarsus I, two spines above on all tibiæ, one near base, one near tip; one spine on patella above. Abdomen rather high, one-fourth longer than broad; the epigynum extremely prominent, the finger projecting away from abdomen. Length 2.8 mm.

Several specimens from Yakutat.

Type.—Cat. no. 5271, U. S. National Museum.

Bathyphantes arctica Keys.

Bathyphantes arctica KEYSERLING, Die Spinn. Amer. Therid., II, p. 85, 1886.

A few specimens from Sitka, Berg Bay, and Kadiak (July). Described from Alaska; also known from Washington.

Bathyphantes sp.

One female of a pale species, with short legs, from Yakutat (June).

Family **DICTYNIDÆ**.**Amaurobius pictus** Simon.

Amaurobius pictus SIMON, Bull. Soc. Zool. France, p. 3 (sep.), 1884.

Two specimens from Cook Inlet and Fox Point (July). Known from California, Oregon, Washington, and British Columbia.

Family **EPEIRIDÆ**.**Epeira trifolium** Hentz.

Epeira trifolium HENTZ, Spid. U. S., p. 110, 1875.

Several specimens from Cook Inlet and Kadiak, June, July. Spread throughout the United States.

Epeira patagiata Emerton.

Epeira patagiata EMERTON, Trans. Conn. Acad., VI, p. 305, 1884.

Many specimens from Kadiak (June, July), Juneau, Kukak Bay (June), and Popof Island. Europe and northern United States.

Epeira displicata Hentz.

Epeira displicata HENTZ, Spid. U. S., p. 117, 1875.

A few specimens from Juneau and Kadiak (July). Entire United States.

Tetragnatha extensa Emerton.

Tetragnatha extensa EMERTON, Trans. Conn. Acad., VI, p. 333, 1884.

Many specimens from Kadiak (July), Fox Point (July), Sitka, and Metlakahtla (June). Europe and northern United States.

Tetragnatha laboriosa Hentz.

Tetragnatha laboriosa HENTZ, Spid. U. S., p. 131, 1875.

Many specimens from Kukak Bay, Kadiak (July), Yakutat (June), Popof Island, Metlakahtla (June), and Sitka. All over the United States.

Zilla californica Banks.

Zilla californica BANKS, Jour. N. Y. Entom. Soc., p. 90, 1896.

One male from Sitka (June). Known from California and Washington.

Family THOMISIDÆ.

Xysticus borealis Keys.

Xysticus borealis KEYSERLING, Verh. zool.-bot. Ges. Wien, p. 668, 1882.

A few specimens from Popof Island and Kadiak (July). Described from Alaska.

Misumena vatia Keys.

Misumena vatia KEYSERLING, Die Spinn. Amer. Later., p. 101, 1880.

One pair from Metlakahtla (June). Europe and the United States.

Tibellus oblongus Keys.

Tibellus oblongus KEYSERLING, Die Spinn. Amer. Later., p. 196, 1880.

A few specimens from Cook Inlet and Kukak Bay (June). Europe and the northern United States.

Family LYCOSIDÆ.

Lycosa albobastata Emerton.

Lycosa albobastata EMERTON, Trans. Conn. Acad., IX, p. 423, 1894.

Two specimens from Popof Island. Known from British Columbia.

Lycosa pratensis Emerton.

Lycosa pratensis EMERTON, Trans. Conn. Acad., VI, p. 483, 1885.

Several specimens from Cook Inlet and Orca (June). Known from the northern United States.

Lycosa quinaria Emerton.

Lycosa quinaria EMERTON, Trans. Conn. Acad., IX, p. 422, 1894.

One female from Popof Island appears to belong here. Described from British Columbia.

Lycosa sp.

One female from Kadiak (July) appears to be near *L. beani* Em., but does not agree very well.

Pardosa grœnlandica Thorell.

Pardosa grœnlandica THORELL, Proc. Bost. Soc. N. H., p. 498, 1875.—
EMERTON, Trans. Conn. Acad., IX, p. 423, 1894.

Several specimens from the Muir Glacier (June). Known from boreal America.

Pardosa glacialis Thorell.

Pardosa glacialis THORELL, Öfv. K. Vetensk., Akad. Förh., p. 159, 1872.—
EMERTON, Trans. Conn. Acad., IX, p. 424, 1894.

A few specimens from Popof Island. Known from boreal America.

Pardosa uncata Thorell.

Pardosa uncata THORELL, Bull. U. S. Geol. and Geog. Surv. Terr., III, no. 2, p. 508, 1877.—EMERTON, Trans. Conn. Acad., IX, p. 425, 1894.

Two specimens from Juneau and Metlakahtla. Known from New Hampshire, Colorado, and British Columbia.

Pirata sp.

One female of a large species from Berg Bay. It is probably new.

PHALANGIDA.**Sclerobunus brunneus** Banks.

Sclerobunus brunneus BANKS, Trans. Amer. Entom. Soc., p. 152, 1893.

Several specimens from Yakutat Bay, Juneau, Cook Inlet, Orca (June), and Kadiak (July). Known from Washington.

Phlegmacera occidentalis Banks.

Phlegmacera occidentalis BANKS, Psyche, p. 51, March, 1894.

♣ Several specimens, all very young, from Sitka (June), Berg Bay, Yakutat (June), and Popof Island. Known from Oregon and Washington.

Leptobunus borealis Banks.

Leptobunus borealis BANKS, Arachn. Commander Isl., p. 350, 1899.

One specimen from Popof Island. Described from the Commander Islands.

Liobunum exilipes (Wood).

Phalangium exilipes WOOD, Comm. Essex Inst., VI, p. 23, 1868.

Two specimens from Yakutat (June), Kadiak (July). Known from California, Nevada and Washington.

Mitopus dorsalis sp. nov.

Plate XXIX, fig. 2.

Gray: a darker median vase-mark, not reaching end of abdomen; through this there is a pale median line from the eye-tubercle backward; cephalothorax and sides of abdomen more or less mottled with pale, dark gray, and black; venter pale, dotted with gray; legs pale, indistinctly marked with brown at ends of joints, the tarsus on apical half blackish; palpi lineate with brown. Eye-tubercle near posterior margin of cephalothorax, quite high, with two rows of small teeth above; on middle of front margin of cephalothorax is a group of small teeth; rest of cephalothorax and dorsum of abdomen with many scattered denticles, those on the latter mostly in transverse rows; legs with many black denticles arranged in rows, no false articulations in meta-

tarsus I, nor in tibia II; palpi with rows of denticles, the patella and tibia on inner side swollen and there thickly clothed with short, erect spine-like hairs, claw not toothed; no supra-mandibular spine. Length 5 mm., femur II, 4 mm.

Two from Popof Island (one not adult and not fully marked from the mountain top).

Type.—Cat. no. 5272, U. S. National Museum.

PSEUDOSCORPIONIDA.

Ideobisium threveneti (Simon).

Obisium threveneti SIMON, Ann. Soc. Entom. France, p. 156, 1878.

Several examples from Cook Inlet, Lowe Inlet (June), Long Inlet, Popof Island, and Yakutat. Known from California, Oregon and Washington.

ACARINA.

Gamasus sp.

Several specimens from Kadiak on a *Necrophorus*, and from Sitka; none in an adult condition, and no males.

Holostaspis exilis sp. nov.

Plate XXIX, fig. 1.

♂. Pale yellowish, the legs still paler. Body about twice as long as broad, tapering each way, broadest before third legs, but slightly convex above, clothed with scattered long, simple hairs, more numerous at tip of body; each side at posterior third of the dorsal shield is a row of four or five round, reddish, impressed dots. Palpi slender; leg I slender, no claw nor sucker at tip; leg II with fourth joint thickened and with a large tooth below, and a small one above, the sixth joint with a small tooth at base and a long blunt spine at tip; legs III with a spur on hind tip of second joint, and one below near middle of third joint; leg IV with the second joint swollen on anterior face, and just before tip with a long slender process; bifid at tip. The peritreme runs directly to the stigmata which are above the third coxæ. The sternal plate is very narrow behind, so that the hind coxæ are not separated by half their width. Length 2 mm.

♀. What appears to be the female of this species is smaller, more reddish, the abdomen broadly rounded behind, the hind coxæ are more widely separated, yet much closer than third coxæ, the legs are unarmed; the dorsal shield shows a slight incision near middle of each side, indicating the division of the immature forms. Length 1.5 mm.

Several specimens from Yakutat, Berg Bay, Sitka, and Popof Island.

Type.—Cat. no. 5273, U. S. National Museum.

PLATE XXIX.

- FIG. 1. *Holostaspis exilis*. ♂
2. *Mitopus dorsalis*.
3. *Gonglydium alascensis*.
4. *Cornicularia varipes*. ♀
5. *Ceratinella* sp.
6. *Lepthyphantes alascensis*. ♀
7. *Erigone famelica*, palpus.
8. *Erigone famelica*, epigynum.
9. *Cornicularia recurvata*. ♂